

and transport medium to the cell culture, where the antigen has to multiply in the cytoplasm of the McCoy cells. Positive chlamydia culture is registered if intracytoplasmic inclusions are seen in the McCoy cells. Several factors may, however, affect the vitality of the chlamydial elementary bodies. Some of the most critical points are the collection of samples, the toxicity of the swabs, temperature during transport, transport time, growth medium, and bacterial contamination of the cell culture. Optimum conditions for all these factors are essential for chlamydial antigen to be recovered. The two other test systems are based on identifying non-vital antigen, which means that these factors are less important for the monoclonal antibody test and the enzyme immunoassay. False positive results of cell culture may occur by misreading iodine stained epithelial cells as chlamydial inclusions, but may also be caused by contamination with charcoal particles from charcoal swabs or infection of the cell culture medium with bacteria, viruses, or mycoplasmas.

As all the methods available for testing for urogenital chlamydial infection give an appreciable number of false positive or negative results, it is important that discrepancies between test results, clinical manifestations, and responses to antibiotic treatment should lead to repeat testing and contact tracing.

Yours faithfully,

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TO THE EDITOR, *Genitourinary Medicine*

Acute syphilitic myelitis in a young man

Sir,

We read with great interest the paper of Lowenstein, Mills, and Simon (*Genitourin Med* 1987;63:333-8) concerning a man aged 26 who had acute syphilitic myelitis. Two years ago we published a report of a similar case, among other early manifestations of neurosyphilis.¹

Our patient was a man aged 17 seen in 1982 with flaccid paraplegia of rapid onset. Analysis of the cerebrospinal fluid (CSF) showed a protein concentration of 1.06 g/l and white cell count of $180 \times 10^6/l$ with a differential count of 85% lymphocytes and numerous plasma cells. His serum in the Venereal Disease Research Laboratory (VDRL) test was positive at a titre of 1/16 and in the fluorescent treponemal antibody absorbed (FTA-ABS) test at a titre of 1/6400. His CSF FTA-ABS test result was positive at a titre of 1/100.

Despite treatment with penicillin and non-reactive CSF at the end of treatment, his paraplegia evolved towards spasticity. Two months before the onset of the neurological manifestations, the patient had had a transient non-pruritic rash on the trunk consistent with roseola. Acute syphilitic myelitis classically belongs to the tertiary stage. Onset during the secondary stage may have been caused by concomitant HIV infection.

Yours faithfully,

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Reference

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TO THE EDITOR, *Genitourinary Medicine*

Prescribing policies for gonorrhoea in the United Kingdom

Sir,

We seek the courtesy of your columns to report the findings of a survey of prescribing policies for β -lactamase (penicillinase)

producing *Neisseria gonorrhoeae* (PPNG) strains in the United Kingdom, which was carried out by the British Co-operative Clinical Group.

During 1986 self administered postal questionnaires were distributed to all consultant physicians working in genitourinary medicine clinics in the United Kingdom. Information was sought about the numbers of PPNG strains isolated in each clinic during the last quarters of 1982 and 1985. In addition, responding clinicians were asked to indicate their choice of antibiotics in different clinical situations during those periods. We received 127 replies, of which six were incomplete. This represented a response rate of 61% (127/209). The table summarises the choices of antibiotics.

We identified three changes between responses for 1982 and 1985, which comprised a drop in the mean number of isolates in each clinic from 1.64 in 1982 to 1.18 in 1985 (not a significant difference), a slight (not significant) shift away from penicillin towards the use of spectinomycin in all clinical situations, and a slight (not significant) shift towards the use of cephalosporins for patients infected overseas.

In general, patterns of prescribing showed little change between heterosexual men, homosexual men, and women. It was interesting that penicillin remained the drug of first choice of four fifths of responding clinics, but spectinomycin was the first choice for treatment failures and for those infected overseas. Very few responders reported the use of either new antibiotics, such as quinolones, or of mixed antibiotic regimens.

Although PPNG strains are now endemic at a low level in the United Kingdom, the continued reliance upon cheap antibiotics in the standard treatment of gonorrhoea contrasts with the situation in many developing countries where PPNG strains predominate and necessitate more expensive single or combination antibiotics in routine treatment.

Most clinics routinely use an antibiotic active against PPNG strains as the first line treatment of gonococcal infections acquired overseas. This may be one factor accounting for the falling incidence of PPNG strains in the United Kingdom.

Yours faithfully,

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Table Antibiotic treatment policies for treating gonorrhoea in 127 clinics*

Clinical situation	Penicillin		Spectinomycin		Cephalosporins		Tetracyclines		Others		Mixed regimens	
	1982	1985	1982	1985	1982	1985	1982	1985	1982	1985	1982	1985
Heterosexual men:												
Local source, local acquisition	81	79	11	11	1	1	1	2	4	2	4	2
Overseas source, local acquisition	47	39	44	47	2	6	0	1	2	4	4	4
Unknown source, local acquisition	76	74	13	14	1	2	1	2	5	5	3	3
Overseas acquisition	24	17	63	65	2	8	1	0	3	4	6	4
Failure of primary treatment	0	1	72	70	9	12	2	1	9	8	3	5
Homosexual men:												
Local source, local acquisition	79	76	10	12	1	2	1	2	7	5	2	2
Overseas source, local acquisition	46	36	43	46	5	9	0	0	3	4	4	4
Unknown source, local acquisition	76	70	15	17	1	3	0	2	6	4	2	3
Overseas acquisition	26	20	62	60	4	11	1	0	3	4	5	5
Failure of primary treatment	0	2	69	69	10	14	2	2	8	8	4	4
Women:												
Local source, local acquisition	80	78	10	12	1	2	2	2	6	5	2	2
Overseas source, local acquisition	46	38	45	47	2	7	0	1	3	2	4	4
Unknown source, local acquisition	75	72	13	15	2	3	2	2	8	5	3	3
Overseas acquisition	28	18	61	62	4	9	1	1	4	5	5	5
Failure of primary treatment	2	2	73	70	7	5	2	1	8	8	5	5

*Percentages of clinics using each drug as first choice in each clinical situation.

TO THE EDITOR, *Genitourinary Medicine***Role of male prostitutes in spread of sexually transmitted diseases and human immunodeficiency virus**

Sir,
Homosexual men are at a high risk of contracting a variety of sexually transmitted diseases (STDs), the risk depending primarily on the sexual techniques performed and the number of partners.¹ Partners are mostly chosen on the basis of a voluntary non-paid relationship. Male prostitution does occur, but it is not known what role these prostitutes play in the transmission of STDs. To study this, in 1986 we approached the owners of five brothels for homosexual men in Amsterdam, four of whom agreed to co-operate. The prostitutes were informed about the nature of the study, and 37 men participated. We questioned each of them about his lifestyle and sexual variables, and a blood sample was collected for serological tests for syphilis, hepatitis B virus (HBV), and human immunodeficiency virus (HIV). We also studied 13 male prostitutes who visited our STD clinics.

The mean age of the 50 men was 22.7 (SD 4.5, range 15–38); nine were intravenous drug users and 10 used cocaine regularly; 25 men had been prostitutes for more than one year. The mean number of clients a month was 24.5 (SD 24.3) and the mean total number of partners (including clients) in the past year was 147.1 (SD 168.6). Of the 50 men, 22 men said that they were predominantly homosexual, 18 bisexual, and 10 predominantly heterosexual. Sexual tech-

niques performed with clients were independent of the prostitutes' private sexual preference, and mostly consisted of masturbation and orogenital contact, whereas anogenital and oroanal contact were practised only rarely (table).

A history of syphilis was mentioned by 11 men, and two new cases of syphilis were detected in this study by serological tests; 29 men had had gonorrhoea at least once. A positive *Treponema pallidum* haemagglutination assay (TPHA) result was found in 13/50, 21/49 had antibodies to hepatitis B core antigen or to surface antigen, or both, and 4/32 had antibodies to HIV, which were confirmed by western blotting (1/4 used intravenous drugs). No correlation was found between the duration of prostitution and the presence of HBV markers, TPHA positivity, or a history of gonorrhoea. The 22 men who said that they were predominantly homosexual,

however, were significantly more often positive in the TPHA (10/22 v 3/28, $p < 0.02$) and for HBV markers (14/21 v 7/28, $p < 0.01$). Fisher's exact probability test was used for statistical calculations.

The number of male prostitutes in Amsterdam fluctuates during the year, but is estimated by social workers from different agencies to be a maximum of 200. Although these prostitutes say that they practise mostly low risk sexual techniques with their clients, a high proportion of these young men had markers of hepatitis B (43%), syphilis (26%), and HIV (13%). Their high risk for contracting STDs was found to depend primarily on their private sexual preferences and relationships.

The total number of homosexual men in Amsterdam is estimated at 25 000–50 000.² It is not known what proportion of them have multiple sexual partners. Serological screening of 1627 homosexual men visiting sex saunas and bars in 1979–81 showed that 32.2% were seroreactive for syphilis,³ and in the same period 60.3% of 2946 homosexual men were found to have hepatitis B markers.¹ In a recent study of 741 homosexual men 31.4% appeared to be HIV seropositive.⁴ Apparently the prevalence of infection in male prostitutes is no higher than in other groups of homosexual men with multiple partners. This indicates that male prostitutes do not play a special part in the spread of STDs and HIV among homosexual men in Amsterdam. The clientele of male prostitutes may, however, include a relatively high number of bisexual men who want to hide their homosexuality, and in this way male prostitution could be a bridge for

Table Sexual techniques performed with clients by 50 male prostitutes in Amsterdam

Technique	No of prostitutes performing this technique with \geq half their clients
Oro-oral	14
Masturbation, active	50
Masturbation, passive	47
Orogenital, insertive	40
Orogenital, receptive	40
Anogenital, insertive	3
Anogenital, receptive	5
Oroanal, insertive	1
Oroanal, receptive	6